

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,591	08/28/2001	Yoshihisa Kiyotoki	NIP-239	3265

7590 08/11/2004 Y STANGER & MALLI

MATTINGLY, STANGER & MALUR, INC. ATTORNEYS AT LAW SUITE 370 1800 DIAGONAL ROAD ALEXANDRIA, VA 22314 EXAMINER SHEEHAN, JOHN P

PAPER NUMBER

ART UNIT 1742

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

F	T	T	1//			
`	Application No.	Applicant(s)				
	09/939,591	KIYOTOKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	John P. Sheehan	1742				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence add	ress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this com D (35 U.S.C. § 133).	munication.			
Status						
1)⊠ Responsive to communication(s) filed on <u>30 Ju</u>	ılv 2004.					
	action is non-final.					
3) Since this application is in condition for allowar		secution as to the r	nerits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims			•			
4)⊠ Claim(s) <u>21-38</u> is/are pending in the application	1					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>21-38</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner	•					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO	-152.			
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priori		d in this National St	age			
application from the International Bureau * See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	d				
* See the attached detailed Office action for a list of the certified copies not received.						
A W 1						
Attachment(s) 1) Notice of References Cited (PTO-892)	δ Π 1-4 · · · · · · · · · · · · · · · · ·	(DTO 440)	,			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa	atent Application (PTO-1	52)			
Apol No(s) Iviali Date	6)					

Art Unit: 1742

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 30, 2004 has been entered.

Claim Objections

Claim 27 is objected to because of the following informalities:

Dependent claim 27 as drafted depends from cancelled claim 1. For the purpose of this Office action the Examiner has assumed that claim 27 was intended to be dependent from claim 21.

Appropriate correction is required.

Claim Rejections - 35 USC § 112/101

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1742

2. Claims 27, 29 and 31 are provides for the use of the claimed alloy, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 27, 29 and 31 are is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 25, 26, 31, 32, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohriner et al. (Ohriner, US Patent No. 4,803,045).

Ohriner teaches an iron based hard facing alloy having excellent wear resistance (column 2, lines 5 to 10), a composition that overlaps the alloy composition recited in instant claims (column 2, lines 40 to 51) and which contains eutectic carbides (column

Art Unit: 1742

2, lines 35 to 36 and column 4, lines 45 to 47) as recited in applicants' claims. Ohriner teach specific example alloys that are encompassed by the alloy composition recited in applicants' claims (column 3, the table, Heats B1, 6995, 6961A, 6998, 6983A, 6961B, 70226B and 7030) each having hardness values that are also encompassed by the hardness values recited in the instant claims (columns 5 and 6, Tables 1 and 2).

The claims and Ohriner differ in that Ohriner does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy compositions taught by Ohriner are encompassed by the instant claims. In view of this, Ohriner's alloys would be expected to posses all the same properties as recited in the instant claims including the coefficient of friction recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 195 USPQ 430, 433 (CCPA 1977). When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would

Art Unit: 1742

have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Further, with respect to claims 37 and 38 it is the Examiner's position that these claims which recite that the claimed alloy is joined with a base metal encompasses the hard facing utility taught by Ohriner.

3. Claims 21, 22, 27, 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (Nakamura, US Patent No. 4,789,412, cited by applicants' in the IDS submitted February 28, 2002).

Nakamura teaches specific examples of cobalt alloys that are encompassed by the alloy composition recited in applicants' claims (columns 7 and 8, the Table, ally Nos. 1 to 17). Nakamura teaches that the disclosed alloy contains eutectic carbides (column 2, line 55). Nakamura teaches that the disclosed alloy has utility as a nozzle of a gas turbine (column 1, lines 10 to 12).

The claims and Nakamura differ in that Nakamura does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction and hardness of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy compositions taught by Nakamura are encompassed by the instant claims. In view of this, Nakamura's alloys would be expected to posses all the same properties as recited

Art Unit: 1742

in the instant claims including the coefficient of friction and hardness recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Further, with respect to claims 27 and 28 it is the Examiner's position that applicants' claim language, "A fluid device" encompasses "a nozzle of a gas turbine" taught by Nakamura.

4. Claims 23, 24, 29, 30, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dong et al. (Dong, US Patent No. 4,911,768).

Dong teaches a nickel base hard facing alloy having a composition that overlaps the alloy recited in applicants' claims (column 2, lines 5 to 20 and 52 to 57). Dong also teaches a specific example alloy that is encompassed by applicants' claims (column 3, the table, Alloy No. 3). Dong teaches that the alloy contains carbides (column 2, lines

Art Unit: 1742

21 and 42 and column 3, lines 15 to 27). Dong also teaches that the alloy can be used in valves (column 1, lines 58 to 62).

The claims and Dong differ in that Dong does not teach the process steps recited in applicants' claims and is silent with respect to the coefficient of friction and hardness of the disclosed alloys.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the specific example alloy composition taught by Dong are encompassed by the instant claims. In view of this, Dong's alloys would be expected to posses all the same properties as recited in the instant claims including the coefficient of friction and hardness recited in the instant claims, In re Best, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

With respect to the process steps recited in the claims it is the Examiner's position that, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process limitations recited in the instant product by process claims do not necessarily lend patentability to the claimed product, MPEP 2113.

Page 8

Further, with respect to claims 35 and 36 it is the Examiner's position that these claims which recite that the claimed alloy is joined with a base metal encompasses the hard facing utility taught by Dong.

Further, with respect to claims 29 and 30 it is the Examiner's position that applicants' claim language, "A fluid device" encompasses the valves taught by Dong (column 1, lines 58 to 62).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John P. Sheeffan Primary Examiner Art Unit 1742